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ACQUIRED BRAIN INJURY AND VIOLENT OFFENDING: PREVALENCE AND RISK FACTORS

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Introduction: Acquired brain injury has been reported to be associated with violence. Objectives: To determine whether an association exists between acquired brain injury and violent offending

Aims: Study an association between brain injury and crime and identify associated risk factors.

Methods: Systematic search of Medline, Embase, PsychInfo, CINAHL, TRIP, using terms, Acquired brain injury, traumatic brain injury (TBI), head injury, frontal lobe, crime, offending, violent offending, sexual offending, prison.

## Results:

A: Multiple studies reported higher life time history of head injury in prison or offender populations in comparison to control groups. Sampling bias and case definition problems have influenced reported prevalence of head injury in offender population ranging from 3.3% to 82%. Reports from secure psychiatric services identify that patients with history of head injury may be more difficult to discharge. Community based studies report cognitive damage as significant risk factor for domestic violence.

B: Large scale population and military cohorts have reported a higher relative risk for criminal conviction in mild traumatic brain injury (TBI) group. TBI increases the risk of mental disorder by two-folds but also that TBI is significantly related to mental disorder with coexisting criminality.

C: Childhood conduct problems, loss of a parent, substance misuse, maternal drug use in pregnancy, impaired executive cognitive functioning, structural damage to orbito-frontal and ventromedial areas, amygdala, and hippocampus are reported as risk factors for violent offending in this population group.

Conclusions: The review provides evidence for an association between brain injury and violent offending and also identifies associated risk factors.